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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/730,232

12/08/2003

Jackson Demond

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08/22/2006

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EXAMINER

NEAL, TIMOTHY J

ART UNIT

PAPER NUMBER

3731

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/730,232	DEMOND ET AL.	
	Examiner	Art Unit	
	Timothy J. Neal	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 18-20, 26, 31, 41-43, 58 and 59 is/are rejected.
- 7) ☒ Claim(s) 7-17, 21-25, 32-40 and 44-57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>see next page</u> . | 6) <input type="checkbox"/> Other: _____ |

Information Disclosure Statements:

02/20/2004

12/09/2004

06/29/2005

11/10/2005

TN

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 18-20, 26, 31, 41-43, 58, and 59 are rejected under 35

U.S.C. 102(e) as being anticipated by Cano et al. (US 6,893,451).

Cano discloses:

Claim 1: An embolic filter assembly, said filter assembly comprising: at least one strand of wire forming a support hoop (Fig 9b Item 24); the strand of wire extending from said support hoop and forming at least one suspension strut (Fig 9b Item 26); the suspension strut coupled, at least in part, to a guide wire or a filter wire or a tube (Fig 1c Item 10); and a blood permeable sac having an opening, said opening fixedly attached to the support hoop, thereby forming a proximal opening or mouth of the embolic filter (Fig 9b Item 12).

Claim 2: the support hoop is self-expanding (Col 7 Line 35).

Claim 3: said support hoop has a preformed shape (Col 7 Line 35).

Claim 4: the support hoop and/or the suspension strut is comprised of a bio-compatible material (Col 13 Line 24).

Claim 5: the bio-compatible material comprises a nickel-titanium alloy (nitinol) (Col 13 Line 24).

Claim 18: emboli-laden blood enters the mouth or proximal opening of the embolic filter, and the emboli becomes entrapped within said blood permeable sac (the Examiner considers this to be functional language directed at intended use and provides no further limitations on the structure of the device; therefore, no patentable weight is given to this claim).

Claim 19: the at least one suspension strut is comprised of at least two sections of the strand of wire forming the support hoop (Fig 9b Item 26).

Claim 20: the at least one suspension strut has an articulation point whereafter the at least two sections of the strand of wire extend proximally for attachment to a guide wire or a filter wire (Fig 9a).

Claim 26: the at least two sections of the strand of wire proximal of the articulation point are mechanically attached to a separate piece of wire forming a longitudinally extending helix around the guide wire or the filter wire, and having the guide wire or the filter wire moveably passing through the lumen of the helix (Fig 9a Item 66).

Claim 31: An embolic filter assembly, said filter assembly comprising: at least one strand of wire forming a support hoop (Fig 9b Item 24); the strand of wire extending from said support hoop and forming at least one suspension strut (Fig 9b Item 26); the

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suspension strut fixedly attached, at least in part, to a tube having a moveable guide wire or a moveable filter wire therethrough (Fig 9a Item 68); and a blood permeable sac having an opening, said opening fixedly attached to the support hoop, thereby forming a proximal opening or mouth of the embolic filter (Fig 9b Item 12).

Claim 41: emboli-laden blood enters the mouth or proximal opening of the embolic filter, and the emboli becomes entrapped within said blood permeable sac (the Examiner considers this to be functional language directed at intended use and provides no further limitations on the structure of the device; therefore, no patentable weight is given to this claim).

Claim 42: the at least one suspension strut is comprised of at least two sections of the strand of wire forming the support hoop (Fig 9b Item 8).

Claim 43: the at least one suspension strut has an articulation point whereafter the at least two sections of the strand of wire extend proximally for attachment to the tube (Fig 9a Item 26).

Claim 58: An embolic filter assembly, said filter assembly comprising: at least one strand of wire forming a support hoop (Fig 9b Item 24); the strand of wire extending from said support hoop and forming at least one suspension strut (Fig 9b Item 26); the suspension strut coupled, at least in part, to a guide wire or a filter wire (Fig 1c Item 10); and a blood permeable sac having an opening, said opening fixedly attached to the support hoop, thereby forming a proximal opening or mouth of the embolic filter (Fig 9b Item 12).

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Claim 59: An embolic filter assembly, said filter assembly comprising: at least one strand of wire forming a support hoop (Fig 9b Item 24); the strand of wire extending from said support hoop and forming at least one suspension strut (Fig 9b Item 26); the suspension strut fixedly attached, at least in part, to a tube having a moveable guide wire or a moveable filter wire therethrough (Fig 9a Item 68); and a blood permeable sac having an opening, said opening fixedly attached to the support hoop, thereby forming a proximal opening or mouth of the embolic filter (Fig 9b Item 12).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cano et al. (US 6,893,451) in view of Macoviak et al (US 6,361,545).

Cano discloses the invention substantially as claimed as stated above. Cano does not disclose the support hoop and/or the suspension strut being comprised of stainless steel.

Macoviak teaches a support hoop comprising stainless steel (Col 11 Line 18). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Cano's hoop to include Macoviak's stainless steel. It is also noted that stainless steel is a well known alternative to nitinol and is

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therefore considered as an obvious variant to the nitinol disclosed in Cano. Such a modification would provide a material with shape memory properties.

Allowable Subject Matter

Claims 7-17, 21-25, 27-30, 32-40, and 44-57 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Neal whose telephone number is (571) 272-0625. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TJN


ANH TUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER

8/20/06